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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,824	04/25/2001	Tsutomu Nakamura	Q62666	6099

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EXAMINER	
MAKI, STEVEN D	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/840,824	NAKAMURA, TSUTOMU	
	Examiner	Art Unit	
	Steven D. Maki	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1) A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 1-30-04 has been entered.

2) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Peter et al

4) Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Peter et al (US 4244415).

Peter et al discloses a pneumatic radial vehicle tire comprising wound strength carriers 9 at an angle of 0-10 degrees with respect to the equatorial plane (EP) and fabric layers 4 below side land portions so as to be located on each side of the equatorial plane. Each fabric layer 4 comprises strength carriers 7 inclined at 18-25

degrees with respect to the circumferential direction. Peter et al teaches that the strength carriers are cords. As can be seen from figure 1, the fabric layers 4 are arranged on an outer circumferential side of layer 8 having the 0 degree cords. As can be seen from figure 2, the cords of a lower one of the fabric layers on one side of the EP are inclined in the opposite direction of the cords in the upper one of the fabric layers on the other side of the EP.

As to claims 7-9, the claimed pneumatic radial tire reads on Peter et al's pneumatic radial tire. The claimed opening space fails to exclude another cross belt member. The claimed tire is not required to be a motorcycle tire and as such fails to require a structurally different tire from that of Peter et al. The description of "arranged on an outer circumferential side of the spiral belt" fails to require each cross belt member to be arranged at the same distance (in contrast to different distances) from the spiral belt.

As to claims 1-3, one of ordinary skill in the art would readily understand that Peter et al's pneumatic vehicle tire is mounted on a front wheel and rear wheel of a vehicle. In other words, the steps of mounting Peter et al's pneumatic vehicle tire on a front wheel and rear wheel is inherent in Peter et al. Each of the limitations of "the cords of the pair of cross belt members have an acute angle of inclination with respect to the equatorial plane in a forward rotating direction of the tire" and "the cords of the pair of cross belt members have an obtuse angle of inclination with respect to the equatorial plane in a forward rotating direction of the tire" are always satisfied when

Peter et al's tire is mounted because Peter et al locates two of the cross cord fabrics beneath each land portion.

5) Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peter et al.

As to claim 4, it would have been obvious to one of ordinary skill in the art to use steel cords having an initial tensile strength of no less than 50CN/cord as the strength carriers since (1) Peter et al suggests using cords as the strength carriers and (2) steel cords having an initial tensile strength of no less than 50CN/cord for a reinforcement between the tread and carcass of a tire is taken as well known / conventional per se; it being noted that applicant has asserted no novelty for these cords per se.

As to claim 5, it would have been obvious to one of ordinary skill in the art to use organic cords having an initial tensile strength of no less than 50CN/cord as the strength carriers since (a) Peter et al suggests using cords as the strength carriers and (2) organic cords (e.g. aramid cords) having an initial tensile strength of no less than 50CN/cord for a reinforcement between the tread and carcass of a tire is taken as well known / conventional per se; it being noted that applicant has asserted no novelty for these cords per se.

6) Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peter et al in view of Aoki et al (US 5431208).

As to claims 6 and 12, it would have been obvious to one of ordinary skill in the art to provide fabrics layers beneath each side land portion such that the total width of the pair of cross belt members including the opening space is 150-70% of a tread width

and a width of the opening space is 1-50 mm since (1) Peter et al teaches extending the fabric layers along the width of the side land portion as shown in figure 1 and (2) Aoki et al, also teaching two circumferential grooves, suggests spacing the side land portions from each other by WY/8 +WY/8 = WY/4 = 188mm / 4 = 47 mm (falling within the claimed range of 1-50 mm).

7) The above rejections based on Peter et al may be overcome by amending each of claims 1-3 and 7 to require each claimed tire to be --pneumatic radial motorcycle tire--; there being no motivation to make Peter et al's tire a motorcycle tire.

Delias

8) Claims 1-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delias (US 5301730) in view of Suzuki (US 5795418) or Armellin (US 6244315).

Delias discloses a pneumatic radial motorcycle tire having a "spiral belt" 12 comprising parallel cords and two cross belt members 13, 14 (each comprising cords) arranged on an outer circumferential side of the spiral belt. Examples 2 and 3 show that the spiral belt layer must be the radially innermost layer to obtain improvement in motorcycle stability. Delias does not recite arranging the cross belt members so as to define an opening space. However, it would have been an obvious alternative to one of ordinary skill in the art to arrange the cross belt members 13, 14 such that they define an opening space as set forth in claim 7 instead of being superimposed since (1) Suzuki, also directed to a motorcycle tire having a spiral belt, teaches arranging cross belt members so as to define an opening space between them (instead of superimposing the cross belt members) so that the tread shoulder region is reinforced

more than the tread central part to thereby prevent collapse of the tread portion during cornering and medium speed corning becomes stable or (2) Armellin, also directed to a motorcycle tire having a spiral belt, teaches that interrupting cross belt members as shown in figure 4 is an alternative to using axially continuous cross belt members (col. 10 lines 15-20).

As to claims 1-3: Delias suggests using the tires on the front and back of a motorcycle (col. 3 lines 8-9) and thereby suggests mounting the same tire on a front wheel and rear wheel. With (a) the same tire and (b) the motorcycle having only two wheels, there are only a limited (i.e. four) mounting possibilities. It would have been obvious to mount the tires as set forth in claim 1 or claim 2 or claim 3 since (1) Delias suggests mounting the same tire on the front and back of a motorcycle and (2) a motorcycle has only two wheels. No unexpected results for the claimed mounting over the above applied prior art has been shown.

As claims 8 and 9, note that the cords in cross members of the applied prior art are at an acute angle.

As to claim 4, it would have been obvious to one of ordinary skill in the art to use steel cords having an initial tensile strength of no less than 50CN/cord in Delias' tire since (1) Delias suggests using cords as reinforcement for the tire and (2) steel cords having an initial tensile strength of no less than 50CN/cord for a reinforcement between the tread and carcass of a tire is taken as well known / conventional per se; it being noted that applicant has asserted no novelty for these cords per se.

As to claim 5, it would have been obvious to one of ordinary skill in the art to use organic cords having an initial tensile strength of no less than 50CN/cord in Delias' tire since (a) Delias suggests using cords as reinforcement for the tire and (2) organic cords (e.g. aramid cords) having an initial tensile strength of no less than 50CN/cord for a reinforcement between the tread and carcass of a tire is taken as well known / conventional per se; it being noted that applicant has asserted no novelty for these cords per se.

As to claims 6 and 12, it would have been obvious to one of ordinary skill in the art to space the cross belt members such that the total width of the pair of cross belt members including the opening space is 150-70% of a tread width and a width of the opening space is 1-50 mm in view of the suggestion from Suzuki or Armellin to space the cross belt members in a motorcycle tire.

Remarks

9) Applicant's arguments with respect to claims 1-9 and 12 have been considered but are moot in view of the new ground(s) of rejection.

10) No claim is allowed.

11) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is (571) 272-1221. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Maki
March 15, 2004

STEVEN D. MAKI 3-15-04
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733